

# *Happenings*

*at the Science Advisory Board  
...insuring a solid technical basis for environmental protection*

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This issue consists of eleven Times New Roman pages.

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## **1. EDITORIAL**

### **EXPLORING A NEW PRODUCT: SAB WORKSHOPS**

For more than two decades the USEPA Science Advisory Board (SAB) has been providing advice to the Agency Administrator. This advice has principally come in the form of Reports resulting from rigorous, independent peer review of near-final Agency technical documents.

Although Reports still constitute the meat-and-potatoes of SAB activity, over the past ten years the Board's "product line" has been expanded to include

- a. Advisories -- Peer review reports of Agency efforts (generally multi-year) that are not yet final and for which a "mid-course" assessment would be valuable.

- b. Commentaries -- Unsolicited advice on an issue of which the SAB believes that Administrator should be made aware.
- c. Consultations -- Discussions on an issue Agency is just beginning to address. The intent is to leaven the Agency's thinking so that they consider a wide range of possible approaches to a problem.

More recently the Executive Committee directed the Board's Committees to explore the potential for a new activity for providing advice; i.e., SAB Workshops. The Workshop format is designed to bring together participants from the Board, the Agency, and outside groups to work together to deal with a particular issue. A written summary of the Workshop experience will document the major outcomes of the Workshop, but the more important contribution may well be the experience of the Workshop itself -- the free-flow exchange of technical information and insights, the social interactions between the parties, and the relationships that may evolve from the encounter.

The Executive Committee is leading the way by conducting a series of Workshops in conjunction with its regularly scheduled face-to-face meetings, the next one of which is slated for March 7-8. Led by Dr. Granger Morgan (Carnegie-Mellon University) and coordinated by Dr. Angela Nugent of the SAB Staff, the Workshops are designed to explore the role of science (i.e., activity and timing) in some of the Agency's new ways of doing business; cf., place-based focus, sector-based focus, etc.

At the direction of the Executive Committee, the Staff is exploring other possibilities for Workshops, including the following:

- a. How to estimate "values" for ecological resources that do justice to both economic and ecological concepts.
- b. How to promote the adoption and diffusion of innovations in an organization.
- c. How to coordinate the efforts of the scientific programs of the Federal agencies to address effectively the issues of Environmental Justice.

We look forward to the contribution that Workshops will make in helping the SAB achieve its goal of "making positive difference in the production and use of science at USEPA". Your reactions and suggestions to this Workshop concept are welcome.

Donald G. Barnes, PhD  
SAB Staff Director

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## **2. TENTATIVE MEETING CALENDAR FOR FEBRUARY AND MARCH**

Several of the Federal Advisory Committee Act (FACA) meetings noted below have been announced in the Federal Register (FR), together with additional background information. Readers can

automatically receive e-mailed copies of FR Notices by subscribing to the SAB Listserver; see Section 6.b.2) below.

If a series of meetings is anticipated, the number of the meeting in the series is indicated in parentheses; e.g., "(#2)" If a meeting is to be conducted via publicly accessible conference call, the data are enclosed in brackets: "[.....]"

A glossary of acronyms appears at the end of the list of March meetings.

## **FEBRUARY**

[Feb 15	Integrated Risk Report Peer Review <i>Chair: Dr. Granger Morgan, Carnegie Mellon University</i> <i>DFO: Dr. John Fowle</i> <i>(<a href="mailto:fowle.jack@epa.gov">fowle.jack@epa.gov</a>)</i>	EC Subcomm.] Tele. AR 6013
[Feb 16	Peer Review - Phase II <i>Chair: Dr. W. Randall Seeker, General Electric Energy</i> <i>&amp; Environ Research Corporation</i> <i>DFO: Dr. John Fowle</i> <i>(<a href="mailto:fowle.jack@epa.gov">fowle.jack@epa.gov</a>)</i>	RSAC] Tele. AR 6013
[Feb 16	Review Meeting <i>Chair: Dr. Joan Daisey, Nat'l Lawrence Berkeley Laboratory</i> <i>DFO: Dr. Donald Barnes</i> <i>(<a href="mailto:barnes.don@epa.gov">barnes.don@epa.gov</a>)</i>	EC] Tele. AR 6530
Feb 23-24	Budget Review <i>Chair: Dr. W. Randall Seeker, General Electric Energy</i> <i>&amp; Environ Research Corporation</i> <i>DFO: Dr. John Fowle</i> <i>(<a href="mailto:fowle.jack@epa.gov">fowle.jack@epa.gov</a>)</i>	RSAC Madison Hotel Washington, DC
[Feb 24	Natural Attenuation <i>Chair: Dr. Domenico Grasso, Smith College</i> <i>DFO: Ms. Kathleen Conway</i> <i>(<a href="mailto:conway.kathleen@epa.gov">conway.kathleen@epa.gov</a>)</i>	EEC] Tele. AR6450V
Feb 25	Benefits Adjustment White Paper <i>Chair: Dr. Robert Stavins, Harvard University</i> <i>DFO: Mr. Thomas Miller</i> <i>(<a href="mailto:miller.tom@epa.gov">miller.tom@epa.gov</a>)</i>	EEAC TBD

## **MARCH**

Mar 1-2	Residual Risk for Lead Smelters II <i>Chair: Dr. Philip Hopke, Clarkson University</i> <i>DFO: Dr. Donald G. Barnes</i> <i>(<a href="mailto:barnes.don@epa.gov">barnes.don@epa.gov</a>)</i>	EC Subcomm. US EPA ERC RTP, NC
Mar 6-8	Natural Attenuation <i>Chair: Dr. Domenico Grasso, Smith College</i> <i>DFO: Ms. Kathleen Conway</i> <i>(<a href="mailto:conway.kathleen.@epa.gov">conway.kathleen.@epa.gov</a>)</i>	EEC Subcomm. AR 6530
Mar 7-8 (am)	Executive Committee Regular Meeting <i>Chair: Dr. Joan Daisey, Nat'l Lawrence Berkeley Laboratory</i> <i>DFO: Dr. Donald G. Barnes</i> <i>(<a href="mailto:barnes.don@epa.gov">barnes.don@epa.gov</a>)</i>	EC 1103 WT Waterside Mall
Mar 8 (pm)	Science & Stakeholder Involvement Workshop <i>Chair: Dr. Granger Morgan, Carnegie Mellon University</i> <i>DFO: Dr. Angela Nugent</i> <i>(<a href="mailto:nugent.angela@epa.gov">nugent.angela@epa.gov</a>)</i>	EC Subcomm. 1103 WT Waterside Mall
Mar 9-10	Pollution Prevention, Measures of Technical Performance and Environmental Technology Verification <i>Chair: Dr. Hilary Inyang, University of Massachusetts</i> <i>DFO: Ms. Kathleen Conway</i> <i>(<a href="mailto:conway.kathleen@epa.gov">conway.kathleen@epa.gov</a>)</i>	EEC AR 6530

### Glossary of acronyms for the uninitiated

CASAC = Clean Air Scientific Advisory Committee

COUNCIL = Council on Clean Air Compliance Analysis

AQMS = Air Quality Modeling Subcommittee

HEES = Health and Ecological Effects Subcommittee

DC = Washington, DC

DFO = Designated Federal Officer (SAB Staff lead)

DWC = Drinking Water Committee

EC = Executive Committee

EEAC = Environmental Economics Advisory Committee

EEC = Environmental Engineering Committee

EHC = Environmental Health Committee

EPEC = Ecological Processes and Effects Committee  
 IHEC = Integrated Human Exposure Committee  
 IRP = Integrated Risk Project  
 RAC = Radiation Advisory Committee  
 RSAC = Research Strategies Advisory Committee  
 RTP = Research Triangle Park, NC  
 SAP = Scientific Advisory Panel (FIFRA) (Not SAB affiliated)  
 TBA = To Be Announced  
 TBD = To Be Determined  
 [Tele] = Publicly accessible telephone conference call

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### **3. COMMITTEE ACTIVITIES IN JANUARY**

**On January 12-13**, a subset of the Research Strategies Advisory Committee (RSAC) of the SAB combined forces with some members of ORD's Board of Scientific Counselors (BOSC) to conduct an initial review of the Agency's Science to Achieve Results (STAR) external research grants program. Co-Chairs Drs. Marilyn Brown (BOSC) and W. Randall Seeker (RSAC) led the group in critically examining the process that has been put in place to support the program. Later activities by the individual SAB Committees will complement this work by examining the impact of the STAR program in specific areas within the Agency.

**On January 26**, the Environmental Engineering Committee (EEC) Natural Attenuation Subcommittee, chaired by Dr. Domenico Grasso of Smith College, met by conference call to refine the charge for its review of the Agency's research program on monitored natural attenuation (MNA).

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### **4. SAB REPORTS IN PROGRESS**

#### ***a) PROJECTS SCHEDULED FOR FEBRUARY 16 EXECUTIVE COMMITTEE TELECONFERENCE MEETING***

1) Review of the STAR Program	RSAC
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#### ***b) PROJECTS SCHEDULED FOR LATER EXECUTIVE COMMITTEE MEETINGS***

1) Review of Assessment of Risks from Radon in Homes	RAC
2) Review of Children's Cancer	EC Subcomm.
3) Review of the draft Chloroform RA/00-40	EC Subcomm.
4) Review of the IRP Final Integrated Report	EC/IRP/SC

5) Review of the IRP Final Overview Report	EC/IRP/SC
6) Review of the IRP Risk Reduction Report	IRP/EEC
7) Review of the Use of Human Data	EC Subcomm.
8) Advisory on Environmental Models	EC/Subcomm
9) Commentary on Measures of Environmental Technology Performance	EEC
10) Commentary on Use of Social Sciences to Reduce Barriers to Pollution Prevention	EEC
11) Commentary on Waste Re-Use	EEC

**c) SAB REPORTS THAT DO NOT REQUIRE EC APPROVAL  
(CASAC and COUNCIL) THAT ARE ALSO UNDER DEVELOPMENT**

1) Diesel Health Assessment Document	CASAC
2) PM Criteria Document	CASAC

**d) PROJECTS THAT HAVE RECEIVED EC APPROVAL AND  
AWAIT COMPLETION**

1) Review of Metals in Sediments Method	EPEC
2) Biotic Ligand Model for Metals in Water Column	EPEC
3) Eco-Soils Screening Level	EPEC

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**5. ABSTRACTS OF NEW REPORTS**

**a) An SAB Report on EPA's Per Capita Water Ingestion in the United States  
EPA-SAB-EC-00-003**

The Drinking Water Intake Subcommittee (DWIS) of the Science Advisory Board's (SAB) Executive Committee reviewed a report on the *Estimated Per Capita Water Consumption in the United States*. The document presents estimates of drinking water ingestion for the total U.S. population and a number of subgroups of interest. Estimates are given for many age, gender, and other descriptors. The Subcommittee was pleased with the report's use of a substantial existing data base to improve upon the current EPA estimates for drinking water ingestion. The current Report is largely descriptive and contains little discussion of factors embedded within the original survey and the Agency's analytical method for deriving estimates that inform the reader of important factors that should guide use of the estimates. The Subcommittee noted its desire to see a greater level of discussion on these elements so that unintended misuse of the data can be minimized.

**b) Closure by CASAC on the Document, *Air Quality Criteria for Carbon Monoxide* (EPA 600/P-99/001B)  
EPA-SAB-CASAC-LTR-00-002**

The Clean Air Scientific Advisory Committee (CASAC) of EPA's Science Advisory Board met on November 18, 1999 to review the October 1999 draft document, *Air Quality Criteria for Carbon Monoxide* (EPA 600/P-99/001B). This was the second draft of the new carbon monoxide (CO) Criteria Document, which is being prepared as part of the review of the national Ambient Air Quality Standard (NAAQS) for CO. The first draft of the document had been reviewed by the Panel on June 9, 1999.

The Committee reached closure on the October 1999 draft document, noting that it was the unanimous view of CASAC that, after incorporation of various final changes discussed with EPA staff, the document will constitute an accurate representation of current scientific knowledge concerning the health effects of CO, and does not need to be reviewed by the Committee again. The scientific criteria contained in the final document will serve as an adequate foundation for completing the review of the appropriateness of the NAAQS for CO.

**c) Commentary on the Agency's Proposed Drinking Water Standard for Radon  
EPA-SAB-EC-COM-00-003**

The Safe Drinking Water Act (SDWA), the Agency is charged with consulting with the Science Advisory Board (SAB) prior to proposal of a drinking water standard, and the SAB is charged with responding as it deems appropriate. In the case of the proposed drinking water standard for radon, the SAB determined that a formal review by the Board is not necessary at this point, since over the past decade, Committees of the SAB have generated more than two dozen reports on radon, its risks, and its mitigation. After hearing an Agency briefing to the Radiation Advisory Committee earlier this month, Dr. Richard Bull (Drinking Water Committee Chair) and Dr. Janet Johnson (Radiation Advisory Committee Chair) were satisfied that the science underlying the proposed radon rule has been adequately reviewed through these numerous earlier SAB reports.

However, the Board expressed concern that they had been inadequately alerted to the scheduling of events surrounding the rule and encouraged the Agency to be more forthcoming in sharing plans, schedules, and expectations relative to issuance of drinking water standards in the future; e.g., arsenic and copper. It is more likely that the SAB will have substantive contributions to make in these cases than it had in the case of radon.

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**6. UPDATES**

**a) Annual Report**

The FY 1999 Annual Report of the SAB Staff, entitled "Science Advisory Board FY 1999 Annual Staff Report: New Wineskins for New Wine," is available for distribution by contacting Ms. Vickie Richardson at

Phone: 202-564-4553

Email: richardson.vickie@epa.gov

This report provides a handy desk reference for SAB information. It includes

- 1) A brief history of the SAB
- 2) A summary of FY 1999 activities
- 3) A list of FY 1999 Members and Consultants
- 4) List of all FY 1999 reports, with Abstracts
- 5) And much, much more!

b) Computer News:

- (1) SAB Website within the EPA Home Page. You are invited to visit the SAB Website at URL:  
<http://www.epa.gov/sab>

The site offers such features as

- (a) Full-text reports for FY1994-FY2000
- (b) Background information about the structure, function, and membership of the SAB
- (c) A rolling two-month calendar of SAB meetings
- (d) The most current issue of HAPPENINGS
- (e) Draft/final agendas of upcoming meetings and draft/final minutes of past meetings.
- (f) And much, much...well, maybe a little bit more!

- (2) SAB Listserver - By subscribing to the free SAB

Listserver, you will automatically receive copies of all Federal Register notices announcing SAB meetings, together with brief descriptions of the topics to be covered at the meetings. These notices will be e-mailed to you within 24-hours of their publication in the Federal Register.

To subscribe, simply send the following message, inserting your names,

Subscribe epa-sab2 FIRSTNAME LASTNAME

to

[listserver@unixmail.rtpnc.epa.gov](mailto:listserver@unixmail.rtpnc.epa.gov)

b) Obtaining copies of SAB reports

- (1) SAB reports are available for distribution by contacting Ms. Nicole Hinds at  
Phone: (202) 564-4541  
Email: [hinds.nicole@epa.gov](mailto:hinds.nicole@epa.gov) or by faxing your request to (202) 501-0256



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## **7. THE BOARD'S BIO**

Our featured member in this month's Board's Bio is Dr. Domenico Grasso who is a member of the SAB's Environmental Engineering Committee (EEC). Just last month he began an exciting new job as the head of Smith College's new engineering program, the first such program at a women's college.



Dr. Grasso is a distinguished environmental engineer who prior to his arrival at Smith headed the civil and environmental engineering department at the University of Connecticut. He is an authority on the remediation of environmental contaminants with a focus on molecular scale processes that underlie nature and behavior of contaminants in environmental systems. Dom is a graduate of Worcester Polytechnic Institute and holds a masters degree from Purdue University and a Ph.D. from the University of Michigan. He is a registered professional engineer in the states of Connecticut and Texas, and has been a visiting scholar at the University of California Berkeley, a NATO Fellow, and an invited technical expert to the United Nations Industrial Development Organization in Vienna. His classes are rigorous engineering courses, yet still manage to explore the social and philosophical issues facing engineers and scientists. His approach is consistent with the SAB's current efforts to consider human and social aspects of environmental systems and the social sciences that can help solve environmental problems.

In addition to his service as a member of the Science Advisory Board he serves on the board of directors of the Association of Environmental Engineering & Science Professors and Sea Change, a non-profit environmental advisory group. He is editor-in-chief of the journal "Environmental Engineering Science." In addition, he is the author of more than 100 technical papers and reports, including four chapters and two books. In 1998, he served on a World Bank-funded international team of scholars that established the first environmental engineering program in Argentina.

Grasso, a passionate advocate for teaching engineering in a liberal arts environment, is looking forward to what he terms "a unique opportunity to build a program and a curriculum from the ground up." "Some schools have attempted to teach engineering this way," he explained, "but haven't fully capitalized on it. The market is in dire need, both of women engineers and engineers generally who are well-grounded in their understanding of the human condition." He is committed to building a rigorous curriculum, based firmly in engineering science and engineering practice.

The January 4, 2000 edition of the Christian Science Monitor featured Dr. Grasso and Smith's new program noting that "Domenico Grasso, the new head of Smith College's fledgling engineering program, is an environmental engineer with a mind to change the world ... while there are fewer women than men in engineering today in the United States, there's no reason that it has to remain that way, Professor Grasso believes ... Grasso says he was especially drawn to Smith's new program because he could mold it along interdisciplinary lines, integrating the humanities into engineering in a way that would create a well-rounded

engineering graduate.” The new Picker Program in Engineering at Smith is expected to produce its first graduates in 2004.

Dr. Grasso’s wife, Susan Hull Grasso, is also an engineer. He has four children, Benjamin, Jacob, Elspeth and Caitlin. The Grassos spend a good part of each summer on Manitoulin Island, the largest freshwater island in the world and located on Lake Huron. Their cabin has no power, so the Grassos find it is a very tranquil and relaxing venue to aestivate and that it provides an opportunity to refocus their lives.

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## **8. MEMBERS/CONSULTANTS/STAFF NEWS**

### **Members/Consultants**

With regret, we note the passing last month of Dr. William Pierson of the Desert Research Institute in Reno, NV. Dr. Pierson served with distinction and humor as a Consultant on several CASAC Panels over the years, including the current Diesel Panel.

### **Staff**

Jack Kooyoomjian will begin an 8-month temporary assignment with the Office of Cooperative Environmental Management (OCEM) in February. OCEM has a variety of functions, many of them closely aligned with the SAB; e.g., coordinating the work of all FACA committees (e.g., the SAB) across the Agency and facilitating the work of specific FACAs. Jack looks forward to broadening his experience and sharing what he has learned after 11 years with the SAB.

Melanie Medina-Metzger, who is currently in OCEM, will join the SAB Staff while Jack is away. She will bring with her a technical background in Water Resources Management, two years of experience as a FACA DFO, nine years of service with the Agency and her high-energy personality.

Jack Fowle will return in early February from an extensive course at the Federal Executive Institute in Charlottesville.

The following Agency Staff have received the USEPA's Bronze Medal for commendable Service "For significant contributions to the Integrated Risk Project, the most complex and wide-ranging project ever undertaken by the Science Advisory Board."

Don Barnes  
Roslyn Edson  
Wanda Fields  
Jack Fowle  
Dorothy Clark  
Kathleen Conway  
Tom Miller  
Carolyn Osborne

Diana Pozun  
Samuel Rondberg  
Stephanie Sanzone  
Tom Super  
Fred Talcott  
Constance Valentine  
Mary Winston

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## **9. BON MOT**

**Here's a true story that is "out of this world"**

According to a note in the Reader's Digest, the California Institute of Technology's Infrared Processing and Analysis Center is charged with studying data from outer space that is transmitted from satellites. Scientists at the Center call their recreational softball team The Infrared Sox.